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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,916	11/14/2005	Harald Kazmierczak	10191/3676	6586

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EXAMINER

RIVERO, ALEJANDRO

ART UNIT	PAPER NUMBER
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2618

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/539,916	Applicant(s) KAZMIERCZAK ET AL.	
	Examiner Alejandro Rivero	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 06/16/2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. The information disclosure statement filed 06/16/2005 lists two foreign patent documents but no copies have been provided, therefore they have not been considered.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is respectfully suggested by the examiner:

DEPLOYMENT OF VEHICLE SAFETY RESTRAINT VIA WIRELESS TRIGGER
SIGNAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "the steering wheel" in line 2. There is insufficient antecedent basis for this limitation in the claim. For the purpose of this examination, claim 10 will be treated as reciting "a steering wheel", instead of the aforementioned phrase.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 9, 10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Masudaya (US 6,441,511).

Consider claim 9, Masudaya discloses a device for wireless (non-contact) transmission of a deployment signal (column 4 line 20- column 5 line 10, column 6 lines 25-57), the device being configured to transmit the deployment signal via a first path (a first carrier) and a redundancy signal to the deployment signal via a second path (a second carrier) (column 3 line 57- column 4 line 19), the device comprising: a primary side (a column side) including two processors configured to exchange data with one another (column 3 line 57- column 4 line 53 where Masudaya discloses a CPU, transmitter/receiver and modulation/demodulation circuits); and a secondary side (a steering-wheel side) in communication with the

primary side (column 3 line 57- column 4 line 53, figure 1), the secondary side including two processors configured to exchange data with one another (column 3 line 57- column 4 line 53 where Masudaya discloses signal generation means, signal comparison circuit, transmitter/receiver and modulation demodulation circuits).

Consider claim 10 (and the rejection under second paragraph of 35 U.S.C. 112), Masudaya discloses all the limitations as applied to claim 9 above and also discloses wherein the primary side is situated in a steering column and the secondary side is situated in a steering wheel (column 3 line 57- column 4 line 53, figure 1).

Consider claim 12, Masudaya discloses all the limitations as applied to claim 9 above and also discloses wherein the primary side (a column side) further includes a first transceiver (transmitter/receiver) configured for wireless (non-contact) transmission connected to the two processors of the primary side (column 3 line 57- column 5 line 10, column 6 lines 25-57, figure 1 where Masudaya discloses a CPU, transmitter/receiver and modulation/demodulation circuits), and wherein the secondary side (a steering-wheel side) includes a first transceiver (transmitter/receiver) block (column 3 line 57- column 5 line 10, column 6 lines 25-57, figure 1 where Masudaya discloses modulation demodulation circuits as well as transmitter/receiver), the first transceiver block including a first of the two processors of the primary side (column 3 line 57- column 5 line 10, column 6 lines 25-57, figure 1 where Masudaya discloses that both sides have transmitter/receiver circuits which are processors, hence the

transmitter/receiver circuit of the steering side includes a first processor (transmitter/receiver circuitry) of the column side since they are connected via non-contact transmission), the first transceiver block being connected to a first terminal of a triggering element (column 3 line 57- column 5 line 10, column 6 lines 25-57, figure 1 where Masudaya discloses demodulation circuit 5 connects to a signal comparison circuit 6 which, depending on a comparison result, will generate an activation (trigger) signal), and wherein the secondary side further includes a second transceiver block (column 3 line 57- column 5 line 10, column 6 lines 25-57, figure 1 where Masudaya discloses signal generation means as well as transmitter/receiver), the second transceiver block including a second one of the two processors of the secondary side (column 3 line 57- column 5 line 10, column 6 lines 25-57, figure 1 where Masudaya discloses signal generation means which is a processor), the second transceiver block being connected to a second terminal of the triggering element (column 3 line 57- column 5 line 10, column 6 lines 25-57, figure 1 where Masudaya discloses signal generation means 8 connect to a signal comparison circuit 6 which, depending on a comparison result, will generate an activation (trigger) signal).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masudaya in view of Blackburn et al. (US 5,232,243).

Consider claim 11, Masudaya discloses all the limitations as applied to claim 9 above and also discloses wherein the primary side is situated in a vehicle chassis (column 2 lines 23-39, column 3 line 57- column 4 line 19 where Masudaya discloses a column side and a steering-wheel side in a car and the limitation "in a vehicle chassis" does not require any structural components to be affixed onto the chassis, therefore Masudaya reads on the limitation since the car chassis houses (hence "in") such components as the steering column and steering wheel) and wherein the secondary side is situated in the vehicle (column 2 lines 23-39, column 3 line 57- column 4 line 19).

Masudaya does not disclose situated in a seat.

Blackburn et al. disclose a secondary side situated in a seat (column 5 lines 10-21, column 7 line 52- column 8 line 14, column 10 lines 3-20).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a secondary side situated in a seat as taught by

Blackburn et al. in the device of Masudaya for the purpose of sensing whether an occupant is in the vehicle seat and deploying an airbag only when there is an occupant in the seat in order to decrease vehicle repair cost (as suggested by Blackburn et al. in column 1 lines 20-37).

9. Claims 13, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masudaya in view of Baughman et al. (US 5,856,710).

Consider claims 13, 14 and 15, Masudaya discloses all the limitations as applied to claim 12 above and also discloses wherein the first transceiver block is configured to receive the redundance signal and the second transceiver block is configured to receive the deployment signal (column 3 line 57- column 5 line 10, column 6 lines 25-57, figure 1 where Masudaya discloses modulation demodulation circuits as well as transmitter/receiver (first block) and signal generation means as well as transmitter/receiver (second block) and a signal comparison circuit which compares a first and second carriers).

Masudaya does not specify receiving inductive (as in claim 13) signals via a first and second winding (as in claim 14) assigned to power and data transmissions (as in claim 15).

Baughman et al. disclose receiving inductive signals via a first and second winding assigned to power and data transmissions (column 2 line 15- column 3 line 24, column 4 lines 8-55, column 5 lines 3-44).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to receive inductive deployment and redundance signals via a first and second winding assigned to transmit power and data as taught by

Baughman et al. in the device of Masudaya since it would be desirable to provide power and data transmissions without any direct electrical connection in order to avoid problems such as inability to perform full rotation of the steering wheel and rattling or squeaky noises during rotation of the steering wheel over bumpy roads (as suggested by Baughman et al. in column 1 line 11- column 2 line 32 and as suggested by Masudaya in column 4 line 20- column 5 line 10, column 6 lines 25-57).

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masudaya in view of Brainerd (US 3,668,627).

Consider claim 16, Masudaya discloses all the limitations as applied to claim 12 above and also discloses wherein the first transceiver block is configured in such a way that the first transceiver block generates a supply voltage (column 5 lines 11-38 where Masudaya discloses generating a predetermined voltage to serve as an activation signal).

Masudaya does not specify closing a high-side switch when deployment occurs, and the second transceiver block generates and monitors a power reserve and closes a low-side switch when deployment occurs.

Brainerd discloses closing a high-side switch when deployment occurs, and the second transceiver block generates and monitors a power reserve (capacitor) and closes a low-side switch when deployment occurs (column 1 line 42- column 2 line 16).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to close a high-side and low-side switches when

deployment occurs and monitor a power reserve as taught by Brainerd in the device of Masudaya since it provides reliable and inexpensive control of when an airbag should be deployed and minimizes malfunction and because a power reserve provides would provide the necessary power for operation in case a primary source fails due to collision (as suggested by Brainerd in column 1 lines 4-33, column 2 lines 10-16 and as suggested by Masudaya in column 1 lines 8-14 and column 2 lines 18-20).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Osajda et al. disclose controlling power supplied to an igniter element.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alejandro Rivero whose telephone number is 571-272-2839. The examiner can normally be reached on Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on

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access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR


NAY MAUNG
SUPERVISORY PATENT EXAMINER